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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,931	01/02/2001	Yacov Zoarez	3142/Assia	1251

7590 09/07/2004

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EXAMINER

RIVERO, MINERVA

ART UNIT PAPER NUMBER

2655

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,931	ZOAREZ ET AL.	
	Examiner	Art Unit	
	Minerva Rivero	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because of legal phraseology in Line 17: "The **said** method of translation can be further used for online automatic translation of web page for Internet users.", also, the abstract exceeds 150 words and is not one paragraph. Correction is required. See MPEP § 608.01(b).

Drawings

2. The drawings are objected to because Fig. 1 (elements 16 and 18) and associated caption text is not clear. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

Art Unit: 2652

amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 6 is objected to because of the following informalities: claim 6 is self-referencing. Appropriate correction is required.

4. Claim 7 is objected to because of the following informalities: language is not clear. Appropriate correction is required.

Examiner will assume claim 7 depends on claim 3 for treatment on the merits.

Art Unit: 2652

5. Claims 1-29 are objected to because of the following informalities: In claims 1, 2, 8, 10-13, 15, 17, 20, 23, 27 and 28, all of these claims end with a semicolon. Appropriate correction is required.

6. Claims 3, 7- 9, 10-14, 18, 22, 23, 26 and 27 are objected to because of the following informalities: numbering of elements is incorrect. Appropriate correction is required.

7. Claims 23, 26 and 27 are objected to because of the following informalities: claim 23 refers to claim 1 as a system, which is inconsistent with the method definition of claim 1. Appropriate correction is required.

Examiner has assumed claim 23 depends on claim 15, which is a system, for treatment on the merits.

8. Claims 1-29 are objected to because of the following informalities: initial letters of claim elements should not be capitalized. Appropriate correction is required.

9. Claims 8-14, 23, and 26-27 are objected to because of the following informalities: In claims 8 and 23, there should be no parentheses in the claim language. Appropriate correction is required.

Art Unit: 2652

10. Claims 9-10 and 13 are objected to because of the following informalities: In claim 9, claim language should not include the following terms: "such as". Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 4, 5, 6, 8, 15, 16, 19, 20, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuno et al. (U.S. 6,760,695).

Regarding claim 1, Kuno et al. disclose a method for translating text sentences from source language to target language using databases including vocabulary and thesaurus of source and target languages, grammar function of each word, translation index, vocabulary of verbs paradigm, vocabulary of preposition, adverb and adjectives inflections, said method comprising the steps of

(i) breaking sentence to text fragments according to punctuation marks (Col 6, Lines 3-4; Col 8, Lines 60-65),

(ii) identifying grammar form of text fragments according to verb inflection, punctuation marks and grammar key words (Col 10, Lines 46-57),

Art Unit: 2652

(iii) identifying dominant tense form of sentence according to verb inflection and identified grammar form of text fragments (Col 10, Lines 56-Col 11, Line 8; Col 5, Lines 32-34),

(iv) identifying subject of text fragment by locating the word appearing next to the first preposition wherein the exact location of the word (before or after the preposition) is specified according to sentence grammar rules of the source language (Col 10, Lines 24-45),

(v) locating all verbs in text fragment and translate each verb to source grammar form in target language using translation index (Col 1, Line 38 -Col 2, Line 3; Fig. 6),

(vi) inflecting each translated verb using vocabulary paradigm according to dominant tense form and according to identified subject (Col 17, Line 20-Col 19, Line 34),

(vii) locate all nouns in text fragment and translate each noun to source grammar form in target language using translation index (Col 1, Line 38 -Col 2, Line 3; Fig. 6; Fig. 9),

(viii) analyzing each noun word grammar form and inflection such as single/plural or male/female (Col 11, Lines 51-65),

(ix) locating all adjectives, prepositions and article words relating to each noun (Fig. 9),

(x) translating located adjectives, prepositions and article words using translation index according to respective vocabulary and translation index (Fig. 9; Fig. 10),

Art Unit: 2652

(xi) inflecting translated adjectives, prepositions and article words according to nouns grammar form using respective vocabulary paradigm (Fig. 6; Fig. 7; Col 15, Lines 9-40),

(xii) Re-arranging translated words order in each text fragment using grammar rule of target language according to grammar function of each word (Col 1, Lines 38-61).

Regarding claim 15, Kuno et al. disclose a system for translating text sentences from source language to target language comprising databases including vocabulary and thesaurus of source and target languages, grammar function of each word, translation index, vocabulary of verbs paradigm, vocabulary of preposition, adverb and adjectives inflections, said system comprising of

(i) editing means for breaking sentence to text fragments according to punctuation marks (Col 6, Lines 3-4; Col 8, Lines 60-65),

(ii) analyzing means for identifying grammar form of text fragments according to verb inflection, punctuation marks and grammar key words (Col 10, Lines 46-57),

(iii) analyzing means for identifying dominant tense form of sentence according to verb inflection and identified grammar form of text fragments (Col 10, Lines 56-Col 11, Line 8; Col 5, Lines 32-34),

(iv) analyzing means for identifying subject of sentence according to word located after/before the first preposition (Col 10, Lines 24-45),

(v) detecting means for locating all verbs in text fragment (Col 1, Line 38 -Col 2, Line 3; Fig. 6),

Art Unit: 2652

(vi) matching means for translating each verb to source grammar form in target language using translation index (Col 1, Line 38 -Col 2, Line 3; Fig. 6),

(vii) editing means for inflecting each translated verb using vocabulary paradigm according to dominant tense form and according to identified subject (Col 17, Line 20-Col 19, Line 34),

(viii) detecting means for locating all nouns in text fragment (Col 1, Line 38 -Col 2, Line 3; Fig. 6; Fig. 9),

(ix) matching means for translating each noun to source grammar form in target language using translation index: (Col 1, Line 38 -Col 2, Line 3; Fig. 6, Fig. 9),

(x) analyzing means for identifying each noun grammar form and inflection such as single/plural or male/female (Col 11, Lines 54-65),

(xi) detecting means for locating all adjectives, prepositions and article words relating to each noun (Fig. 9),

(xii) matching means for translating located adjectives, prepositions and article words using translation index according to respective vocabulary and translation index (Fig. 9; Fig. 10),

(xiii) edit means for inflecting translated adjectives, prepositions and article words according to nouns grammar form using respective vocabulary paradigm (Fig. 6; Fig. 7; Col 15, Lines 9-40),

(xiv) editing means for re-arranging translated words order in each text fragment using grammar rule of target language according to grammar function of each word (Col 1, Lines 38-61).

Art Unit: 2652

Regarding claim 16, Kuno et al. disclose including vocabulary of idioms and their respective translation (Col 12, Lines 14-33).

Regarding claims 4 and 19, Kuno et al. disclose the subject of the sentence is determined according to the word located after/before the first verb (Col 10, Line 58 – Col 11, Line 8).

Regarding claims 5 and 20, Kuno et al. disclose the step of and means of locating key words that are frequently used in specific area (Col 8, Lines 25-30).

Regarding claims 6 and 21, Kuno et al. disclose the step of and means for determining sentence context according to located key words (Col 9, Lines 5-23).

Regarding claims 8 and 23, Kuno et al. disclose the step of and means for (1) intercepting communication data received by a terminal computer (Fig. 1); (2) detecting text objects in communication data designated for display (Fig. 1, elements 23, 12, 16, 20), (3) processing the detected text sentences according to steps (i) to (xii) (Fig. 1) and (4) replacing original text objects with the representative translation (Fig.1, element 41).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2652

14. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (U.S. 6,760,695) in view of Koyama et al. (U.S. 5, 541,838).

Regarding claims 2 and 17, Kuno et al. disclose the elements as applied to claims 1 and 16 above, and further disclose the step of and means for searching each text fragment for idioms according to idioms' vocabulary (Col 12, Lines 14-33), but fail to disclose the step of and means for recording respective translation of idioms.

However, Koyama et al. disclose the step of and means for recording respective translation of idioms (Col 18, Lines 64-66; Fig. 34). This allows for reduction of translation time (See Koyama et al., Abstract).

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. with the recording of translation of idioms as taught by Koyama et al. with the motivation of reducing the processing time required to translate the idiom.

15. Claims 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (U.S. 6,760,695) in view of Duan et al. (U. S. 6,721,697).

Regarding claims 3 and 18, Kuno et al. disclose the elements as applied to claims 1 and 16 above. However Kuno et al. do not disclose but Duan et al. do disclose the step of and means for (1) locating all possible translations of each word using translation index (Fig. 2a), (2) detecting all synonyms of translated word using thesaurus database (Fig. 2a, element 214) and (3) selecting preferred translation word or synonym word according to identified sentence subject, dominant tense form,

Art Unit: 2652

meaning of detected idioms and meaning of adjacent words (Col 6, Line 65 – Col 7, Line 32). Accessing all possible translations for the source word reduces translation ambiguity, synonyms generated by the use of a thesaurus database increase translation flexibility and versatility, and selecting a preferred translation word according to the various parameters will result in a more exact translation.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Kuno et al. with an index containing all possible translations, a thesaurus database and a selection of preferred translation based on various parameters as taught by Duan et al. since it reduces translation ambiguity, increases translation versatility and produces a more accurate translation.

16. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (U. S. 6,760,695) in view of Duan et al (U.S. 6,721,697), as applied to claims 3 and 18 above, and further in view of Berger et al. (U.S. 5,510,981).

Regarding claims 7 and 22, the combination of Kuno et al. and Duan et al. discloses the elements of claims 3 and 18 above, but fails to disclose the selection of preferred word for translation is determined additionally by detected sentence context. However, Berger et al. disclose the selection of preferred word for translation is determined additionally by detected sentence context (See Abstract). Using the sentence context as part of the translation process results in a more accurate translation.

Art Unit: 2652

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. and Duan et al. by using the sentence context as a variable in the translation process as suggested by Berger et al., in order to achieve a more accurate translation.

17. Claims 9, 10, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (U.S. 6,760,695) in view of Mukaigawa et al. (U.S. 6,246,976).

Regarding claims 9 and 24, Kuno et al. disclose the elements of claims 8 and 21 above, but fail to disclose the step of and means for detecting dominant language of text objects according to language frequent keywords. However Mukaigawa et al. disclose the step of and means for detecting dominant language of text objects according to language frequent keywords (Col 3, Lines 40-48). Determining the dominant language is essential in order to effectuate a translation, using keywords for dominant language determination permits automatic source language identification.

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. with a step and means for detecting dominant language using keywords as in Mukaigawa et al., since this will allow the translation system to automatically determine the source language.

Regarding claims 10 and 25, Kuno et al. disclose the step of and means for determining target language according to user definitions (Col 2, Lines 6-31).

Art Unit: 2652

18. Claims 11, 12, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (U.S. 6,760,695) in view of Okajima et al. (U.S. 4,502,128).

Regarding claims 11, 12, 26 and 27, Kuno et al, do not disclose but Okajima et al. do disclose the further steps of and means for (1) recording original fragments text and translated text of frequently used sentences (Col 19, Lines 41-53), (2) in case of detecting recorded sentences in text objects retrieve recorded translation text and to replace original text (Col 1, Lines 41-53), (3) editing means for retrieving recorded translation text and to replace original text in case of detecting recorded sentences in text objects (Col 1, Lines 41-53), (4) recording translated text of groups of frequently used groups of text objects (Col 1, Lines 41-53), (5) in case of detecting group of recorded sentences in text objects retrieve recorded translation text and to replace original text (Col 1, Lines 41-53) and (6) editing means for retrieving recorded translation text and to replace original text , in case of detecting group of recorded sentences in text objects (Col 1, Lines 41-53). Recording frequently used text objects along with their respective translations will result in a faster translation of the input language.

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. with step of and means for recording frequently used text objects, detection of frequently used text objects and display of translation to replace original text as taught by Okajima et al., since these modifications will result in reduction of the translation time.

19. Claims 13 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al (U.S. 6,760,695) in view of Mukaigawa et al. (U.S. 6,246,976) as applied to claims 9 and 25 above, and further in view of Marcu (U.S. 20020040292A1).

Regarding claims 13 and 28, the combination of Kuno et al. and Mukaigawa et al. discloses the elements of claims 9 and 25 above, but fails to disclose step of and means for changing alignment of text object according to paragraph format rules of target language.

However, Marcu et al. disclose changing alignment of text object according to paragraph format rules of the target language (Page 8, Paragraph 119). Changing the alignment of the text object according to the format rules of the target language will result in a clearer, more accurate translation.

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. and Mukaigawa et al. by changing the alignment of the text object according to the target language's format rules as taught by Marcu et al. since it will result in a clearer, more accurate translation.

20. Claims 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al (U.S. 6,760,695) in view of Hirayama et al. (U.S. 20010003814).

Regarding claims 14 and 29, Kuno et al. do not disclose but Hirayama et al. do disclose a step of and means for the text object content is identified according to keywords installed within the communication data (Page 4, Paragraph 58). Keyword

Art Unit: 2652

searching allows for a more efficient processing of large amounts of communication data.

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to modify the teachings of Kuno et al. by identifying the text object content according to keywords within the communication data as taught by Hirayama et al. since this allows for more efficient processing of the communication data.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


Schulze (U.S. 6,167,369)

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (703) 605-4377. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR 09/01/2004



W. R. YOUNG
PRIMARY EXAMINER